The Food and Drug Administration's (FDA's) 2015 ORSI Science Symposium April 27, 2015

SPEAKER ABSTRACTS AND BIOGRAPHIES

Session 4: Broad Agency Announcement (BAA) Research Contract Program Presentations – 1:45-3:00 PM

Speaker	John Brownstein, PhD
name and	Associate Professor, Harvard Medical School
title	Co-Founder, Epidemico
Contractor	Epidemico, Inc.
Biography	Dr. John Brownstein, Ph.D. is Co-Founder at Epidemico, Inc. Additionally, he is an Associate Professor at Harvard Medical School. Dr. Brownstein directs the Computational Epidemiology Group at the Children's Hospital Informatics Program in Boston. He was trained as an epidemiologist at Yale University. Overall, his research agenda aims to have translation impact on the surveillance, control and prevention of disease. He has been at the forefront of the development and application of public health surveillance including HealthMap.org, an internet-based global infectious disease intelligence system. The system is in use by millions each year including the CDC, WHO, DHS, DOD, HHS, and EU, and has been recognized by the National Library of Congress and the Smithsonian. Dr. Brownstein has advised the World Health Organization, Institute of Medicine, the US Department of Health and Human Services, and the White House on real-time public health surveillance. He was awarded the Presidential Early Career Award for Scientists and Engineers, the highest honor bestowed by the United States government to outstanding scientists and engineers. He has authored over a hundred and fifty peer-reviewed articles on epidemiology and public health.
Title of the project	Social Media Listening for Adverse Event Surveillance
Presentation Abstract	While adverse events are significantly underreported, various social media platforms have given voice to patients who share their experiences with medical products in public forums. MedWatcher Social was developed with support from the FDA to collect, categorize, and analyze such consumer-reported health experiences from social media venues like Facebook, Twitter, and patient forums. It enables regulatory scientists to quickly gain a comprehensive understanding of patient-product interactions in the context of adverse events, as well as consumer sentiments, product switching behavior, off-label use of media I products, and adherence. Our automated vernacular-to-regulatory (MedORA) translations, Natural Language Processing (NLP) and machine learning algorithms are accompanied by manual curation to effectively distill insights from huge amounts of noise and to ensure accurate output reporting.